determining an authority value <u>and a hub value</u> of <u>each of</u> said plurality of sites, wherein n is a natural number,

wherein the emergent concept is detected as a collection of related sites exceeding a minimum connectivity threshold.

8. (Amended) A method for detecting at least one emergent concept among a plurality of sites as in claim [1] 7 wherein said nth eigenvector $X^{(n)}$ is a [principal] <u>non-principal</u> eigenvector of said product $A^T A$.

9. (Amended) A method for detecting at least one emergent concept among a plurality of sites as in claim [1] <u>8</u> wherein said nth eigenvector $Y^{(n)}$ is a [principal] <u>non-principal</u> eigenvector of said product [$A^T A$] <u>$A A^T$</u>.

Please add the following new claims:

14. (New) A method for detecting and tracking at least one emergent concept among a plurality of sites comprising the steps of:

creating at least one adjacency matrix, A , said adjacency matrix having a plurality of entries, $A_{i,j}$,

wherein i and j are among said plurality of sites; $A_{i,j} = r$ if said sites i, j are connected; $A_{i,j} = 0$ otherwise; and r is a positive number,

computing a transpose matrix , A^T, of said adjacency matrix A,

computing nth eigenvectors, $X^{(n)}$ and $Y^{(n)}$, of the matrix products of said transpose matrix and said adjacency matrix, $A^T A$ and $A A^T$, respectively, for determining an authority value and a hub value of each site, wherein n is a natural number greater than one, and wherein said nth eigenvectors $X^{(n)}$ and $Y^{(n)}$ are non-principal eigenvectors,

detecting the emergent concept as a collection of related sites exceeding a minimum connectivity threshold, and

repeating the forgoing steps after passage of a time period for tracking said emergent concept and for detecting new emergent concepts.

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15. (New)   The method of claim 14 wherein sites i and j are connected by World Wide Web references.

16. (New)   The method of claim 14 further comprising allocating a lexical score to a collection of sites in order to selectively construct the adjacency matrix.

17. (New)   The method of claim 16 wherein the lexical score is calculated by means of latent semantic indexing.

18. (New)   The method of claim 14 wherein the value of r is larger if the connection between sites i and j is more recent in time.

19. (New)   A method for detecting at least one emergent community among a plurality of entities under surveillance by an intelligence service comprising the steps of:

creating at least one adjacency matrix, A , said adjacency matrix having a plurality of entries, $A_{i,j}$,

wherein i and j are among said plurality of entities; $A_{i,j} = r$ if said entities, i, j are communicating; $A_{i,j} = 0$ otherwise; and r is a positive number;

computing a transpose matrix , A^T, of said adjacency matrix A,

computing nth eigenvectors, $X^{(n)}$ and $Y^{(n)}$, of the matrix products of said transpose matrix and said adjacency matrix, $A^T A$ and $A A^T$, respectively, for determining an authority value and a hub value of each entity, wherein n is a natural number greater than one, and wherein said nth eigenvectors $X^{(n)}$ and $Y^{(n)}$ are non-principal eigenvectors of said products, and

detecting the emergent community as a collection of related entities exceeding a minimum connectivity threshold.

20. (New)   The method of claim 19 wherein $A_{i,j} = r$ only if entities i, j have communicated within a determined previous time period.

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21. (New) The method of claim 20 wherein the value of r is larger if the communication between sites i, j is more recent.

22. (New) Computer executable software code stored on a computer readable medium that, when loaded into a computer, causes the computer to perform the method of claim 1.

23. (New) Computer executable software code stored on a computer readable medium that, when loaded into a computer, causes the computer to perform the method of claim 14.

24. (New) Computer executable software code stored on a computer readable medium that, when loaded into a computer, causes the computer to perform the method of claim 19

25. (New) A programmed computer system for detecting at least one emergent concept among a plurality of sites comprising:

at least one memory having at least one region storing computer executable program code, and

at least one processor for executing the program code stored in said memory, wherein the program code causes the processor to perform the method of claim 1.

26. (New) A programmed computer system for detecting and tracking at least one emergent concept among a plurality of sites comprising:

at least one memory having at least one region storing computer executable program code, and

at least one processor for executing the program code stored in said memory, wherein the program code causes the processor to perform the method of claim 14.

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27. (New)   A programmed computer system for detecting at least one emergent community among a plurality of entities under surveillance by an intelligence service comprising:

at least one memory having at least one region storing computer executable program code, and

at least one processor for executing the program code stored in said memory, wherein the program code causes the processor to perform the method of claim 19.

28. (New)   The method of claim 1 wherein the minimum connectivity threshold depends on authority values or on hub values or on both.

29. (New)   The method of claim 1 wherein sites *i* and *j* are connected by World Wide Web references.

30. (New)   The method of claim 15 further comprising a step of posting a report of said emergent concept, wherein the report comprises World Wide Web references to the collection of related sites.

31. (New)   The method of claim 19 further comprising the step of repeating the steps of claim 19 after passage of a time period to track the evolution of the emergent community and to detect new emergent communities.

32. (New)   The method of claim 31 wherein the time period is calibrated to detect communities suspected of engaging in illegal collusive practices.

33. (New)   The method of claim 21 wherein the value of r is adjusted to detect accelerations in the pattern of communications.